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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/657,053

09/05/2003

Eduard F. Boeckmann

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06/16/2006

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EXAMINER

PARRIES, DRUM

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/657,053

**Applicant(s)**

BOECKMANN, EDUARD F.

**Examiner**

Dru M. Parries

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed May 8, 2006, regarding claim 1 have been fully considered but they are not persuasive. As stated in case law, "mere duplication...has no patentable significance unless a new and unexpected result is produced." In this instance, the idea of having a plurality of loads and the extra calculations and the monitoring of more loads that goes along with it is obvious to one of ordinary skill in the art and therefore is not considered *unexpected*.
2. Applicant's arguments, see page 6 and 7, filed May 8, 2006, with respect to claim 6 have been fully considered and are persuasive. The previous rejection of claim 6 has been withdrawn.
3. Applicant's arguments filed May 8, 2006, regarding claim 8 have been fully considered but they are not persuasive. According to Sashida, the weighted factor for devising the impedance in this instance is having appropriate impedance for restricting the cross current in the output frequency (Col. 10, lines 23-25). Therefore, the weighted factor would be the cross current.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Sashida et al. (5,257,180). Sashida teaches connecting a remote load (4) to a loop (11) to a power converter (100). He teaches devising an impedance (405a) for a feed back loop according to the cross

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current. He also teaches connecting the feed back loop to the power converter, wherein the feedback loop is closer to the converter than the load. (Fig. 1)

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sashida et al. (5,257,180). Sashida teaches connecting a remote load (4) to a loop (11) to a power converter (100). He also teaches connecting a feed back loop to the power converter, where the feedback loop consists of two paths in parallel. The two paths being one with the voltage detector (300) and the other with the current detection circuit (406a) (Fig. 1). He also teaches an error amplifier (403) connected to the feedback loop (Col. 14, lines 23-32). Sashida fails to teach a plurality of remote loads. It would have been obvious to one of ordinary skill in the art at the time of the invention to add more loads to the output of the circuit since it has been held that mere duplication of the essential working parts of a device has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 124 USPQ 378.

8. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sashida et al. (5,257,180) as applied to claim 1 above, and further in view of Balakrishnan et al. (2005/0141246). Sashida teaches a power supply device as described above. Sashida fails to

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teach a feedback path including a low-pass filter or a capacitor-resistor network. Balakrishnan teaches a voltage feedback path including a low-pass filter comprising a capacitor-resistor network ([0029], lines 1-4; Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a low-pass filter into the voltage feedback path of Sashida's invention so that it could filter out the voltage spikes.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sashida et al. (5,257,180) as applied to claim 1 above, and further in view of Komatsuzaki (JP 06-038537). Sashida teaches a power supply device as described above. Sashida fails to teach a feedback path including a high-pass filter. Komatsuzaki teaches a voltage feedback path including a high-pass filter (Constitution). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a high-pass filter into the voltage feedback path of Sashida's invention so that it could filter out signals that are too low and could be misinterpreted.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sashida et al. (5,257,180) as applied to claim 1 above, and further in view of De Groot (6,465,992). Sashida teaches a power supply device as described above. Sashida fails to teach a feedback path including a band-pass filter. De Groot teaches a voltage feedback path including a band-pass filter (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a band-pass filter into the voltage feedback path of Sashida's invention so that it will reduce the ripple voltage around the passband.

***Allowable Subject Matter***

11. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. No prior art of record teaches the definition of the gain as claimed in claim 6.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on M-Th from 8:00am to 5:00pm. The examiner can also be reached on alternate Fridays.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMP

6-8-2006



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